ABSTRACT

Methods and apparatus are provided for trapping metastability events to provide a metastable-free output signal. Values of an input signal compared to at least three different threshold voltages are latched at a predetermined point in time. A first intermediate signal is activated when all of the at least three corresponding latched values are in a first logic state. A second intermediate signal is activated when all of the at least three corresponding latched values are in a second logic state. An output signal is placed in a first predetermined logic state in response to the second intermediate signal and is changed from the first predetermined logic state to a second predetermined logic state in response to the first intermediate signal.